

**REMARKS**

Claims 1-16 are all the claims pending in the application. Claims 1, 4-6 and 8-13 have been amended. In addition, new claims 14-16 have been added. Support for the amendments can be found in the specification.

No new matter has been added.

Entry of the above amendments is respectfully respected.

**I. RESPONSE TO REJECTION UNDER 35 U.S.C. §102, OR IN THE  
ALTERNATIVE, UNDER 35 U.S.C. §103**

Claims 1-13 are rejected under 35 U.S.C. §102 (a) or, in the alternative, under 35 U.S.C. § 103(a) over Villard et al. (WO 01/97772, and it's equivalent US 2004/0028637).

Applicants respectfully traverse.

The present invention was carried out to solve the problem of using copolymers comprising cross-linking monomers, whereby water insoluble polymers may be produced as a result of crosslinking. See paragraph [0006] of the specification. The present invention is directed to a non-crosslinked water-soluble copolymer prepared in the absence of a crosslinking monomer. Furthermore a non-crosslinked water-soluble copolymer consists entirely of water-soluble polymers. The results in Table 1, show that the polymers of Examples 1-5 consist solely of water-soluble components, i.e. the water-soluble fraction is 100% by weight. In addition, the results in Table 2, show that the polymers of Examples 6-19 were smoothly dissolved into a clear colorless and homogenous liquid phase (see page 21 of the specification). In view of the above, it is clear that the present invention discloses the use of non-crosslinking monomers.

Although, Villard teaches a thickening polymer for an aqueous medium obtained by polymerization, the process involves cross-linking at least one unsaturated weak acid and at least one unsaturated strong acid such as 2-acrylamido-2-methylpropanesulfonic acid (AMPS) in the presence of cross-linking agent. The thickening polymer is further characterized by a water-soluble polymer fraction ranging from 5 to 50 % by weight, preferably 8-35 % (abstract, claim 1). Furthermore, Villard teaches a “cross-linking agent” in claim 4, or “a cross-linking rate” in claims 4, 10, 12, 13 and 19. Please note the terms “cross-linked” or cross-linking” in paragraphs 0003, 0009, 0031-0037, 0050, 0059, 0061 and 0079 of Villard.

Villard does not teach or suggest a non-crosslinked water-soluble polymer having a weight average molecular weight of 6,000,000 or higher of the present invention. In view of the above, reconsideration of the present claims is respectfully requested.

## **II. RESPONSE TO REJECTION UNDER 35 U.S.C. §103**

Claims 1-13 are rejected under 35 U.S.C. §103 (a) as being unpatentable under Melby et al (US Patent No. 6,066,315).

The Applicants respectfully traverse.

The water-soluble thickener of this invention is a water-soluble polymer obtainable by polymerizing as essential monomers AMPS and acrylic acid (both in salt form). The water-soluble thickener of the present invention does not need an ammonium monomer as an essential component. The aqueous detergent of this invention is acidic and preferably strongly acidic as described in section 2.2, paragraph [0054-0055] of the specification.

Melby et al teaches an ampholyte polymer, that has an ammonium ion residue such as acrylamidopropyltrimethyl ammonium chloride (APTAC) or methacrylamidopropyltrimethyl

ammonium chloride (MAPTAC), and an acidic salt residue (such as a salt of AMPS or a salt of acrylic acid). See column 4, lines 61-65. Melby et al teaches an ampholyte polymer for use as a cosmetically acceptable medium such as moisturizing night cream (see Example 24), moisturizing hand lotion (see Example 26), hand and body lotion (see Example 27), and neutralizing shampoo (see Example 29). The compositions disclosed in Melby et al are necessarily near neutral. A pH range of 3 to 10 (column 10, line 36) or 7-11 (column 11, line 4) is indicated, which is outside of “acidic”, and even further outside of “strongly acidic” as in the present invention.

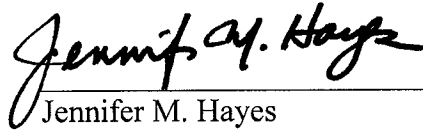
In view of the above, the present invention is patentable over Melby et al and the Applicants respectfully request reconsideration of said claims.

### **III. CONCLUSION**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

A handwritten signature in black ink, reading "Jennifer M. Hayes", is written over a horizontal line.

Jennifer M. Hayes  
Registration No. 40,641

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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